

### ABSTRACT OF THE DISCLOSURE

An automotive sound pressure level (SPL) meter is described that includes a means for mounting the SPL meter within an motor vehicle to measure motor vehicle audio system SPL values within the motor vehicle. The automotive SPL meter includes an internal microphone, or

- 5 Pressure sensor, that is designed for automotive use. Such Pressure sensor improvements may include: use of a thicker and highly durable polytetrafluoroethylene (PTFE) microphone/Pressure sensor diaphragm; use of a thicker, non-conducting gasket to increase microphone/Pressure sensor excursion capability; use of a reduced number of microphone/Pressure sensor back plate holes; and/or, reducing the diameter of
- 10 microphone/Pressure sensor back plate holes. The automotive SPL meter is highly resistant to operational environment temperature, humidity and decibel level extremes without sacrificing accuracy. A programmable micro-controller is used to increase design flexibility, and reduce the SPL meter discrete component count, thereby increasing reliability while reducing SPL meter physical size and production costs.